

## **A. PROFILE: - GULF EXTRUSIONS**

# GULF EXTRUSIONS

Gulf Extrusions Co. LLC, the flagship company of the Al Ghurair Group of Companies, was founded in 1978, Dubai, UAE where it has over the years earned the reputation known as one of the most innovative and reliable companies in the Middle East.

Located close to its raw material supplier Dubai Aluminium Company Ltd (DUBAL), the world's largest single smelter site, Gulf Extrusions has become one of the largest extrusion plants in the region.

Gulf Extrusions quality products can be seen in many of today's progressive structures. The company was formed with the sole purpose to meet the increasing demands for aluminium extrusions in domestic, regional and international markets.

Gulf Extrusions six presses and highly skilled workforce are able to produce 65,000 metric tonnes per annum with a rated capacity of 24,000 tonnes for powder coated finish, 6,000 tonnes for anodized finish and can offer more than 10,000 profile designs. These extrusions cover numerous industries ranging from architectural to transportation, engineering to structural sections, components for household items, HVAC and customized products.

During the progressive stages of Gulf Extrusions, from its inception to expansion, the company not only has acquired a majority share in the local market, it has also made its presence felt globally throughout the GCC countries, Indian sub -continent, South East Asia, Australia, Africa, Europe and Canada.

Our commitment and utmost priority is to provide customers with the finest quality of aluminium extrusions.

Gulf Extrusions looks ahead to inevitable challenges and product advancements of the new era.

Quality is an inseparable element of all activities carried out at Gulf Extrusions. Gulf Extrusions is dedicated to respond and deliver on time, high quality, tailor-made and cost effective products. The management and staff are committed to implement a comprehensive and integrated Quality Management System in accordance with the International Quality Standards of ISO 9001 and ISO 14001.

### INTERNATIONAL STANDARD COMPLIANCE

Extrusions Dimensions Tolerances:

- BS EN 755-9:2008
- BS EN 12020-2:2008
- DIN 1748, DIN 17615
- ASTM B221

Powder Coated Finish :

- BS:6496 Clause: 10.4, 10.5, 10.6, 10.7 & 10.8
- ISO 2360 / 2813 / 2409 / 2931
- Minimum Film Thickness - 60 Microns

Anodizing Finish :

- BS EN 12373-1 2001 Clause 7 (BS: 6161 Part 6)
- BS:3987 Clause 2, 3, 5, 6
- Appendix- A, B, C, D, E, F, G, H, J, K, L Minimum Film Thickness- 16 Microns



### PRODUCT QUALITY CERTIFICATES



Qualicoat (European Powder Coaters Association):

- A quality label for coating on metal for Architectural Applications
- A product license under the control of EWAA (European Wrought Aluminium Association) in Zurich Switzerland

Qualanod (European Anodizers Association):

- A quality label organization to guarantee high quality Aluminium Anodizing.
- A product license under the control of EWAA (European Wrought Aluminum Association) in Zurich Switzerland

- SASO

- ESMA

Management :

- ISO 9001 (Quality Management System)
- ISO/TS 16949:2009 (Management System)

Environment:

- ISO 14001 (Environment Management System)



Membership in International Organization :

- AAC member (Aluminium Anodizers Council - USA)
- AEC member (Aluminum Extruders Council - USA)
- DIN EN 15088



## CHEMICAL COMPOSITIONS

### ALLOY 6005A

Element	Minimum	Maximum
Si	0.50	0.90
Fe		0.35
Cu		0.30
Mn		0.50
Mg	0.40	0.70
Cr		0.30
Zn		0.20
Ti		0.10
Other Each		0.05
Other Total		0.15
Aluminium	Remainder	

### ALLOY 6060

Element	Minimum	Maximum
Si	0.30	0.60
Fe	0.10	0.30
Cu		0.10
Mn		0.10
Mg	0.35	0.60
Cr		0.05
Zn		0.15
Ti		0.10
Other Each		0.05
Other Total		0.15
Aluminium	Remainder	

### ALLOY 6063

Element	Minimum	Maximum
Si	0.20	0.60
Fe		0.35
Cu		0.10
Mn		0.10
Mg	0.45	0.90
Cr		0.10
Zn		0.10
Ti		0.10
Other Each		0.05
Other Total		0.15
Aluminium	Remainder	

### ALLOY 6082

Element	Minimum	Maximum
Si	0.70	1.30
Fe		0.50
Cu		0.10
Mn	0.40	1.00
Mg	0.60	1.20
Cr	0.04	0.15
Zn		0.20
Ti		0.10
Other Each		0.05
Other Total		0.15
Aluminium	Remainder	

### ALLOY 6061

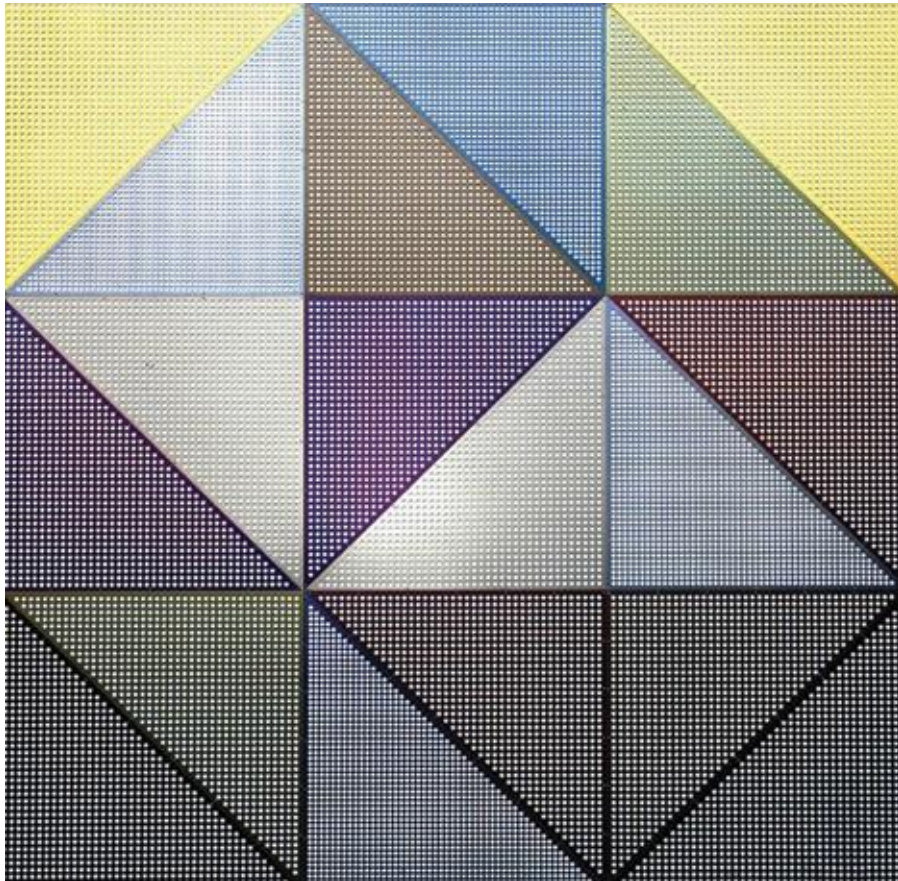
Element	Minimum	Maximum
Si	0.40	0.80
Fe		0.70
Cu	0.15	0.40
Mn		0.15
Mg	0.8	1.20
Cr	0.04	0.35
Zn		0.25
Ti		0.15
Other Each		0.05
Other Total		0.15
Aluminium	Remainder	

**ANODIZING**

A wide range of anodizing treatment options are possible for the aluminium profile sections of this system. The color choices from Gulf Extrusions range from Natural, Gold, and Bronze to Spectra colors (Red, Blue, Green, and Gray).

This surface treatment process involves first pre-treatment with scotch brite brushing for the unfinished profiles, and then subsequently fully immersing the aluminium profiles in an acidic electrolyte solution through which electric current is passed creating an anodic film on the profiles ranging from 5-30MICs.

The process is guaranteed and certified for use by QUALANOD - A quality label Organization to guarantee high quality aluminium anodizing and the company's ISO 9001 certification.



**Authorization to use the quality sign**



This is to certify that

**Gulf Extrusions Co. Ltd**

P.O. Box 5598  
AE – 5598 Dubai

**Licence number: 2000**

is authorized to use the quality sign which is shown above according to the REGULATIONS FOR USE OF THE QUALANOD QUALITY LABEL FOR SULPHURIC ACID-BASED ANODIZING OF ALUMINIUM.

**Date of issue of the licence:** 10.03.2000  
**Period of validity of the licence:** until 31.12.2013

Zurich, 7 December 2012

**QUALANOD**

**CERTIFICATION BODY**

Timur Ulucak  
President

Josef Schoppig  
AC-Fiduciaire SA



Mailing address:  
QUALANOD, P.O. Box 1507, CH-8027 Zurich  
Domicile:  
QUALANOD c/o AC-Fiduciaire SA, Tödistrasse 47, CH-8002 Zurich

Phone: +41 (0)43 305 09 70  
Fax: +41 (0)43 305 09 88  
E-mail: info@qualanod.net  
Internet: www.qualanod.net

## **POWDER COATING**

- Horizontal & Vertical Powder coating lines with an Annual Capacity of 24 000 MT  
Powder Coating BS: 6496 Clause: 10 .4, 10 . 5, 10.6, 10.7, & 10.8  
ISO 2360/2813/2409/2931  
Minimum Film Thickness - 60 Microns

A wide choice of colors for powder coating can be used for the aluminium profile sections .

From Gulf Extrusions the following powder types are available

- Polyester Finish (PE-F)
- Super Durable Finish (SDF) & Hyper Durable Finish (HDF) (Where SDF & HDF are equivalent to Poly-Vinylidene Difluoride (PVDF) in terms of corrosion performance)
- Anti Bacterial (recommended to be used in Hospitals)
- Anti Static (recommended for laboratories, electronics assembly buildings) and Heat Resistant in nature.

This surface treatment process involves the following pre-treatment

1. Degreasing
2. Washing
3. Etching
4. Washing
5. Chromatising
6. Double washing in dematerialized water

Once completed, powder is applied using an electrostatic spraying process with charged powder particles, followed by curing in an oven under a controlled temperature of 180-200C for paint polymerization where the paint layer is at least 60mic.

This whole process is certified for use from QUALICOAT - A quality label for coating on metal for Architectural Applications.

GUARANTEE PERIOD:  
10 years for PE-F Quality  
25 years for PE-SDF



**Authorization to use the quality sign**



This is to certify that  
**Gulf Extrusions Co. Ltd**  
 P.O. Box 5598  
 AE – 5598 Dubai

**Licence number: 1901**

is authorized to use the quality sign which is shown above according to the REGULATIONS FOR THE USE OF THE QUALICOAT QUALITY SIGN FOR PAINT, LACQUER AND POWDER COATINGS ON ALUMINIUM FOR ARCHITECTURAL APPLICATIONS.

Date of issue of the licence: 15.03.2000  
 Period of validity of the licence: until 31.12.2013

Zurich, 7 December 2012

QUALICOAT

*M. C. Panam*

Mohammed C. Panam  
 President

CERTIFICATION BODY

*JS*

Josef Schoppig  
 AC-Fiduciaire SA



Mailing address:  
 QUALICOAT, P.O. Box 1507, CH-8027 Zurich  
 Domicile:  
 QUALICOAT c/o AC-Fiduciaire SA, Tödlstrasse 47, CH-8002 Zurich

Phone: +41 (0)43 305 09 70/79  
 Fax: +41 (0)43 305 09 98  
 E-mail: info@qualicoat.net  
 Internet: www.qualicoat.net

# INTRODUCTION TO THE SYSTEM

TB-600 Thermal break Hinged system is a unique, elegant 60mm width frame designed to achieve a better performance with a wide variety of frames available to cover the needed applications. It is designed for heavy duty use (H-HC40) according to the American National Standard. The results have been impressive to energy conservation, sound reduction, water and dust proofing.

The importance of thermal conductivity in the aluminum frame becomes apparent when one considers that the frame accounts for an average of 25% of the total window surface.

Normal Aluminum Profiles  $k=5.7 \text{ W/M}^2\text{K}$   
With 16mm Thermal Strip  $K=3.3 \text{ W/M}^2\text{K}$

All profiles are available in all colors in order to meet today's modern architectural requirements, along with the possibility of bi-coloration due to the separation done by the thermal break strips.

For better performance of the System, Alignment cleats for the frame and the shutter are used. Durable weather sealment mastic is a must at all joints. Specially designed EPDM gaskets are made available with the system to enhance the performance and create easy assembly. Other accessories such as rollers and flush handles come as part of the system.

## Sections:

The sections in gulf extrusions line are produced by extruding aluminum on a wide range of presses starting with a 800 tons to 4400 tons press. They are made of aluminum alloys 6060,6063,6082,6005 according to British Standard Specification for extrusion Dimensions Tolerances BS EN 755-9:2008 and BS EN 12020-2:2008

## Frame:

Tubular with a width of 60mm, a wide range of frames is available to suit most of the required application in the building codes.

## Sash:

Tubular straight. They are 60 or 67 mm thick. A wide range available to cover all applications of doors, single and double leaves and outward openings even swing doors.





فحص المواد  
Materials Testing  
www.bodycote.com  
www.middleeast.bodycote.com

## Confirmation of Testing Compliance

### CLADDING TECHNOLOGY DIVISION

Ref. AFBT Report No: DLR0448      Date: June 2008

AFBT COTC No: WQ 07 23352 / C595

**System Supplier:**  
Gulf Extrusions Co.,  
P. O. Box 5598,  
Dubai,  
U.A.E

**Installer:**  
Gulf Extrusions Co.,  
P. O. Box 5598,  
Dubai,  
U.A.E

**System:**                      System Development  
SIDE HINGED WINDOW

Al Futtaim Bodycote (AFB) tested components from the above-mentioned system at their Dubai laboratory on the date shown for the following parameters:

- › Air Infiltration      ASTM E283-04
- › Water Penetration    ASTM E331-00 (Static)
- › Wind Resistance    ASTM E330-02 (Serviceability)
- › Wind Resistance    ASTM E330-02 (Safety)

At the time of test, the system was found to comply with specification requirements for all the parameters tested. This confirmation of testing compliance relates only to the system described above, installed and tested at AFB Dubai laboratory, as fully detailed in test report referenced above.

Tests marked '\*' in this report are not included in our UKAS schedule of accreditation.

Signed:  Test Engineer

Signed:  Cladding Manager



**GULF EXTRUSIONS CO. LLC**

**PO BOX 5598, Jebel Ali Industrial Area,  
Dubai, United Arab Emirates.**

**Tel: +971 4 8846146 Fax: +971 4 8846830**

**Toll Free (in UAE): 800-GULFEX**

**[www.gulfex.com](http://www.gulfex.com)**

